

LSI.85US01 (03-0642)

**AMENDMENTS TO THE CLAIMS**

The present listing of claims replaces all prior versions and listings of claims in the subject patent application.

**Claim 1 (original):** A method of analyzing the effects of a high frequency transmission system comprising:

modeling a high frequency signal source as an ideal voltage source and a resistance and capacitance circuit;

modeling bond wire connections within said transmission system using an equivalent resistance, capacitance and inductance circuit;

modeling an integrated-circuit package in said transmission system using an equivalent resistance, capacitance and inductance circuit;

modeling a package stub in said transmission system as an unterminated transmission line; and,

selecting a package trace such that the length of said package stub is sufficiently short so that transmission line effects of said package stub occur at a frequency higher than the highest-expected frequency used by said package trace.

**Claim 2 (currently amended):** The method of claim 1 further comprising:

modeling a trace wire of a printed circuit board in said transmission system using an equivalent resistance, capacitance and inductance circuit;

**Claim 3 (original):** The method of claim 2 further comprising:

modeling a printed circuit board stub as an unterminated transmission line; and

selecting a printed circuit board trace such that the length of said printed circuit board stub is sufficiently short so that transmission line effects of said package stub occur at a frequency higher than the highest expected frequency of a signal applied to said trace wire.

**Claim 4 (original):** A device that minimizes transmission line effects of high

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frequency electrical signals in an integrated-circuit transmission system made by a process comprising:

modeling a high frequency signal source as an ideal voltage source;

modeling bond wire connections within said integrated-circuit transmission system using an equivalent resistance, capacitance and inductance circuit;

modeling an integrated-circuit package using an equivalent resistance, capacitance and inductance circuit;

modeling trace wire connections between a printed circuit board and said integrated-circuit package using an equivalent resistance, capacitance and inductance circuit;

modeling a package stub within said integrated-circuit package, which acts as an unterminated transmission line between a package connector pad and an edge of said integrated-circuit package; and,

selecting a length of said package stub so that any transmission line effects along said package stub occur at a frequency higher than the highest-expected frequency used by said integrated-circuit package.

Claim 5 (original): The device of claim 4 further comprising:

modeling trace wires of a printed circuit board in said transmission system using an equivalent resistance, capacitance and inductance circuit.

Claim 6 (original): The device of claim 5 further comprising:

modeling a printed circuit board stub as an unterminated transmission line; and,

selecting a printed circuit board trace such that the length of said printed circuit board stub is sufficiently short so that transmission line effects of said package stub occur at a frequency higher than the highest expected frequency of a signal applied to said trace wire.